## **SPECTROPHOTOMETER**



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# ANALYTICAL EXCELLENCE ...

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### **Double Beam Scanning UV / VIS Spectrophotometer**

#### FEATURES:

- Environmental Deuterium lamp
- Real-time monitoring of the Deuterium- and Tungsten lamps lifetimes
- Socket-type Deuterium and Tungsten lamps
- GLP self-check function wavelength accuracy and photometry accuracy, provides test report and power-off protection
- Wavelength calibration, wavelength setting, change lamp source and dark current calibration automatically
- SiO<sub>2</sub> coating optical mirror, reducing outside influence

#### **BASIC FUNCTIONS:**

- Photometry
  - o Test Abs, Transmittance and Energy by fixed wavelength
- Quantitative
  - o Linear fit and Linear fit through zero two modes
    - Coefficient, standard sample input and standard sample read three modes to establish standard curve
    - Establish A=K1\*C+K0, can search original data, graph curve, parameter settings
    - Can save 240 group curves, can test 240 data in each curve
    - Double wavelength, triple wavelength test functions



- Kinetics
  - $\circ$  Used for time course scanning or reaction rate calculations  $\Delta A/t$ , can search all data
- Multi-Wavelength
  - $\circ$   $\,$  Can test transmittance and Abs. with 8 different wavelengths at most  $\,$
- Scanning
  - The scanning range can be set from 190nm to test the max. Abs peak value, can do derivation, arithmetical operations to the graph
- Biology
  - o 6 methods: DNA/Protein, UV, Lowry, BCA, CBB and Biuret

### **MODEL SPECIFICATIONS:**

Model	MA-D560	MA-D580	MA-D590
Optical System	Single Beam, Grating 1200 lines/mm		
Wavelength Range	190~1100nm		
Spectral Bandwidth	1.8nm	1nm	0.5, 1, 2, 4, 5nm
Wavelength Accuracy	±0.3nm		
Wavelength Repeatability	≤0.2nm		
Photometric Accuracy	±0.002A (0~0.5Abs), ±0.004A (0.5~1.0Abs), ±0.3% T (0~100% T)		
Photometric Repeatability	0.001Abs (0~0.5Abs), 0.002Abs (0.5~1.0Abs), ≤0.2% T (0~100% T)		
Stray Light	≤0.04 T @ 360nm; 220nm		
Stability	±0.0003A/h @ 500nm		
Baseline Flatness	±0.0005A		
Noise	±0.0002Abs		
Display	65 thousand true colour 7-inch TFT LCD (480*800)		
Photometric Mode	Т, А, С, Е		
Photometric Range	0~200% T, -0.301~3.0A		
Detector	Silicon Photodiode		
Light Source	Deuterium- Tungsten Lamp		
Input	Membrane keypad		
Output	USB-A*2 print and data output, USB-B connect PC		
Standard Accessories	1cm standard single slot cuvette holder, 1cm glass cuvette*4		
Optional Accessories	Long optical path cuvette holder, cuvette, micro cuvette, test tube type absorber rack, solid sample holder, Deuterium- and Tungsten lamps, quadruple cuvette holder, printer, four-slot water bath type constant temperature absorption pool, X-Y adjustable micro absorption pool, single bath type constant temperature absorption pool, program controlled thermostatic absorption pool seat, 8 racks, scanning software		
Power Supply	AC110/220V±10%, 60/50Hz		
Package Size (W*D*H*) mm	740*570*440		
Gross Weight (kg)	25		